

Response to office action of 8/25/05 for appl. No. 10/767,637

In the claims:

Please amend claim 1 and cancel claims 4-5. Please add new claim 6.

This listing of claims will replace all prior versions of claims and listings of claims in the application:

What is claimed is:

- 1) (currently amended) A method for fusing a first vertebra to a second adjacent vertebra, the method comprising:
 - a) providing an implant, the implant comprising a body having first and second opposite surfaces, wherein each of the surfaces includes at least one protruding member for securing the body to an adjacent vertebra, each protruding member of the implant having a profile including a generally arcuate portion that encompasses more than one hundred and eighty degrees, and wherein the implant has sufficient tensile and sheer strength to permit fusion of the vertebrae and each of the surfaces and protruding members includes a bioactive coating;
 - b) forming at least one keyway in the first vertebra corresponding to each of the at least one protruding members on the first surface and at least one keyway in the second vertebra corresponding to each of the at least one protruding members on the second surface, wherein each keyway has a profile including a generally arcuate portion that encompasses more than one hundred and eighty degrees; and

- c) inserting the implant between the first vertebrae and the second vertebra in a manner so that each protruding member slides into the corresponding keyway, such that fusion of the vertebrae is achieved without a bone graft.
- 2) (original) A method according to claim 1, wherein at least one of the opposite surfaces of the implant includes a plurality of protruding members.
- 3-5) (cancelled).
- 6) (new) A method for fusing a first vertebra to a second adjacent vertebra, the method comprising:
- a) providing an implant, the implant comprising a body having first and second opposite surfaces, wherein each of the opposite surfaces includes two protruding members for securing the body to an adjacent vertebra, each member being disposed about an axis of symmetry lying on the corresponding surface such that each member protrudes beyond the height of the corresponding surface along the axis of symmetry, and each of the surfaces and protruding members includes a bioactive coating;
 - b) forming two keyways in the first vertebra corresponding to the two protruding members on the first opposite surface and two keyways in the second vertebra corresponding to the two protruding members on the second opposite surface, the keyways shaped to securely receive the protruding members; and
 - c) inserting the implant between the first vertebra and the second vertebra in a manner so that each protruding member slides into the

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corresponding keyway,

such that fusion of the vertebrae is achieved without a bone graft.